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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/662,181	09/14/2000	Richard J. McCurdy	L10389	2443

7590

02/25/2003

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EXAMINER

CHEN, BRET P

ART UNIT

PAPER NUMBER

1762

DATE MAILED: 02/25/2003

18

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.
09/662,181

Applicant(s)
Richard J. McCurdy

Examiner
Bret Chen

Art Unit
1762



-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on _____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 33-86 is/are pending in the application.
- 4a) Of the above, claim(s) 56-86 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 33-55 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

*See the attached detailed Office action for a list of the certified copies not received.

- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s). 13, 15, 6) ☐ Other:

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DETAILED ACTION

Claims 33-86 are pending in this application. Canceled claims 1-32 are noted in the preliminary amendments dated 9/14/00 and 10/23/00.

Election/Restriction

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
 - I. Claims 33-55, drawn to a coating method, classified in class 427, subclass 255.31.
 - II. Claims 56-61, drawn to a method of hydrophilifying a surface, classified in class 204, subclass 157.4.
 - III. Claims 61-86, drawn to a product, classified in class 428, subclass 702.

2. The inventions are distinct, each from the other because of the following reasons:

Inventions I and II are directed to two different and patentably distinct methods.

Inventions (I, II) and III are related as process of making and product made. The inventions are distinct if either or both of the following can be shown: (1) that the process as claimed can be used to make other and materially different product or (2) that the product as claimed can be made by another and materially different process (MPEP § 806.05(f)). In the instant case, the product as claimed can be made by another and materially different process such as lamination.

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3. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.

4. During a telephone conversation with John Callahan on February 24, 2003, a provisional election was made without traverse to prosecute the invention of Group I, claims 33-55.

Affirmation of this election must be made by applicant in replying to this Office action.

Claims 56-86 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

5. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(I).

Specification

6. Applicant is reminded of the proper content of an abstract of the disclosure.

A patent abstract is a concise statement of the technical disclosure of the patent and should include that which is new in the art to which the invention pertains. If the patent is of a basic nature, the entire technical disclosure may be new in the art, and the abstract should be directed to the entire disclosure. If the patent is in the nature of an improvement in an old apparatus, process, product, or composition, the abstract should include the technical disclosure of the improvement. In certain patents, particularly those for compounds and compositions, wherein the process for making and/or the use thereof are not obvious, the abstract should set

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forth a process for making and/or use thereof. If the new technical disclosure involves modifications or alternatives, the abstract should mention by way of example the preferred modification or alternative.

The abstract should not refer to purported merits or speculative applications of the invention and should not compare the invention with the prior art.

Where applicable, the abstract should include the following:

- (1) if a machine or apparatus, its organization and operation;
- (2) if an article, its method of making;
- (3) if a chemical compound, its identity and use;
- (4) if a mixture, its ingredients;
- (5) **if a process, the steps.**

Extensive mechanical and design details of apparatus should not be given.

It is noted that the claimed invention is directed to a method. The examiner suggests amending the abstract to reflect same.

7. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

It is noted that the claimed invention is directed solely to a method. The examiner suggests amending the title to reflect same.

Claim Rejections - 35 USC § 112

8. Claims 33-55 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

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The limitations listed below are deemed new matter as there appears to be no support for same in the specification as originally filed:

In claim 33, the terms “first major surface” and “opposite major surface” are deemed new matter. The same issue applies to claims 35, 47, 49.

In claim 33, the limitation of “tin diffused therein” is deemed new matter. The same issue applies to claims 35, 47, 49.

In claim 33, the limitation of “positioning a chemical vapor deposition coating apparatus over the surface of the float ribbon” is deemed new matter. The same issue applies to claims 35, 47, 49.

In claim 33 line 10, the term “in the crystalline phase” is deemed new matter. The same issue applies to claims 35, 41, 47, 49, 51, 55.

In claim 33 line 10, the term “photocatalytically-activated self-cleaning coating” is deemed new matter. The same issue applies to claims 35, 37, 40-43, 47, 49, 51, 54, 55.

In claim 35, the term “annealing ... in air” is deemed new matter. The same issue applies to claim 49.

In claim 37, the phrases “melting glass batch materials in a furnace”, “delivering the molten glass onto a bath of molten tin”, “pulling the molten glass across the tin bath whereupon the glass is sized and controllably cooled”, “to form a dimensionally stable glass float ribbon”, “moving the float ribbon by conveying roller through a lehr”, “moving the float ribbon to a cutting

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station on conveying rollers where the ribbon is cut into glass sheets” are deemed new matter.

The same issue applies to claim 51.

In claim 39, the limitation of having a coating thickness “up to 1300A” is deemed new matter. While it is noted that a thickness of 1300 is listed in Example 5 of Table 1, there is no support for said limitation above. The same issue applies to claims 41, 46, 53, 55.

In claim 42 lines 6-7, the phrase “said silica layer inhibits migration of sodium ions ... self-cleaning coating” is deemed new matter.

In claim 43, the phrase “annealing the photocatalytically-activated self-cleaning coating to increase ... self-cleaning coating.

In claim 44, the term “glass sheet” is deemed new matter.

In claim 45, the phrase “the chemical vapor deposition process has a minimum temperature ... to provide sufficient decomposition of the titanium precursor” is deemed new matter.

In claim 46, the term “to permit a sufficient portion of the coating ... retains its activity” is deemed new matter.

In claim 47, the limitation “said coating has a photocatalytically-activated self-cleaning reaction rate of at least about $2 \times 10^{-3} \text{ cm}^{-1} \text{ min}^{-1}$ ” is deemed new matter. The same issue applies to claim 49, 51, 55.

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9. Claims 33-55 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 33 line 4, the phrase “characteristic of forming the glass float ribbon on a molten tin bath” is vague and confusing as to what it is referring to. The same issue applies to claim 35, 47, 49.

In claim 35, the term “annealing-the” is confusing. The examiner suggests deleting the hyphen.

In claim 35, it is not clear whether the depositing step is different from the production step. Clarification and appropriate amendments are requested.

In claim 45, the limitation that “the chemical vapor deposition process has a minimum temperature ... to provide sufficient decomposition of the titanium precursor” does not appear to be a limitation but is inherent to a CVD process. Furthermore, the term “sufficient decomposition” is a relative term which renders the claim indefinite. The term is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention.

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Interference

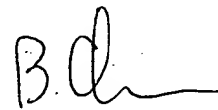
Applicant has requested on several occasions (papers dated 9/14/00, 7/16/01, 8/10/01) that an interference be declared. A determination of this issue has resulted in a decision not to declare an interference at the present time.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bret Chen whose telephone number is (703) 308-3809. The examiner can normally be reached on Monday through Friday from 10:00 am to 7:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Shrive Beck, can be reached on (703) 308-2333. The fax phone number for this Group is (703) 872-9310. Amendment After Finals should be faxed to (703) 872-9311.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-0661.

bc
February 24, 2003



BRET CHEN
PRIMARY EXAMINER